USPTO Serial No.: 10/791,238

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## Amendments to the Claims:

1. (Currently amended) A parametric equalizer, comprising: an audio filter having a plurality of electronic components for filtering a first audio signal;

a first control mechanism having a variable resistive element coupled to a first node within the plurality of electronic components for controlling a center frequency of the audio filter for modifying a center frequency of the first audio signal; and

a second control mechanism consisting of a rotary control knob having mechanically coupled to wiper arms of first and second commonly controlled variable resistive elements, the first and second commonly controlled variable resistive elements being respectively coupled to second and third nodes within the plurality of electronic components, wherein the first and second commonly controlled variable resistive elements jointly control a signal level and a bandwidth of the audio filter for simultaneously modifying a signal level and a bandwidth of the first audio signal, the rotary control knob being configured to rotate in a first direction to move the wiper arms of the first and second commonly controlled variable resistive elements in corresponding first directions to simultaneously increase the signal level and increase the bandwidth of the first audio signal and the rotary control knob being configured to rotate in a second direction to move the wiper arms of the first and second commonly controlled variable resistive elements in corresponding second directions to simultaneously decrease the signal level and decrease the bandwidth of the first audio signal, the second control mechanism including a mechanical

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input, the mechanical input consisting of one rotary control knob or one linear slide control coupled to the first and second commonly controlled variable resistive elements.

- 2. (Original) The parametric equalizer of claim 1, wherein the first control mechanism includes a potentiometer having a terminal coupled to the first node within the plurality of electronic components.
- 3. (Original) The parametric equalizer of claim 1, wherein the second control mechanism includes a potentiometer housing the first and second commonly controlled variable resistive elements, the first resistive element having a terminal coupled to the second node within the plurality of electronic components and the second resistive element have a terminal coupled to the third node within the plurality of electronic components.
- 4. (Original) The parametric equalizer of claim 1, wherein the first and second control mechanisms are mounted to a control panel for user access.
- 5. (Original) The parametric equalizer of claim 1, wherein the plurality of electronic components includes a gain amplifier, the first resistive element of the second control mechanism being coupled to an input of the gain amplifier for adjusting the signal level of the audio filer.
- 6. (Original) The parametric equalizer of claim 1, wherein the plurality of electronic components includes a summing node, the second resistive element of the second control mechanism

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being coupled to the summing node for adjusting the bandwidth of the gain amplifier.

- 7. (Currently amended) An audio system, comprising:
- a parametric equalizer having attributes determined by a plurality of control parameters, the parametric equalizer including an audio filter having a plurality of electronic components; and

a first control interface coupled for jointly controlling first and second control parameters of the parametric equalizer, the first control interface including a mechanical input, the mechanical input consisting of one rotary control knob or one linear slide control coupled to the audio filter, the first control parameter being signal level of the audio filter and the second control parameter being bandwidth of the audio filter, the mechanical input being configured to move in a first direction to simultaneously increase the signal level and increase the bandwidth of the parametric equalizer and the mechanical input being configured to move in a second direction to simultaneously decrease the signal level and decrease the bandwidth of the parametric equalizer.

## 8. (Cancelled)

- 9. (Previously presented) The audio system of claim 7, further including a second control interface coupled for controlling a third control parameter of the parametric equalizer.
- 10. (Original) The audio system of claim 9, wherein the second

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control interface includes a variable resistive element coupled to a first node within the plurality of electronic components.

- 11. (Original) The audio system of claim 9, wherein the third control parameter is a center frequency of the audio filter.
- 12. (Original) The audio system of claim 9, further including a control panel for mounting the first and second control interfaces.
- 13. (Previously presented) The audio system of claim 7, wherein the first control interface includes first and second commonly controlled variable resistive elements respectively coupled to first and second nodes within the plurality of electronic components.

## 14. (Cancelled)

- 15. (Currently amended) The audio system of claim 79, wherein the second control interface includes a potentiometer housing the first and second commonly controlled variable resistive elements, the first resistive element having a terminal coupled to a first node within the plurality of electronic components and the second resistive element have a terminal coupled to a second node within the plurality of electronic components.
- 16. (Original) The audio system of claim 7, further including a guitar for generating audio signals which are routed to the parametric equalizer.

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- 17. (Original) The audio system of claim 16, further including a pre-amplifier coupled for receiving the audio signals from the guitar.
- 18. (Original) The audio system of claim 17, further including a power amplifier having an input coupled to an output of the pre-amplifier.
- 19. (Original) The audio system of claim 18, further including a speaker system having an input coupled to an output of the power amplifier.
- 20. (Original) The audio system of claim 7, further including a bass guitar for generating audio signals which are routed to the parametric equalizer.
- 21. (Original) The audio system of claim 20, further including a pre-amplifier coupled for receiving the audio signals from the bass guitar.
- 22. (Currently amended) A signal processing circuit, comprising:
  - a filter:
- a first variable resistor coupled to a first node within the filter for controlling a first parametric function of the filter, the first variable resistor including a first wiper arm; and
- a second variable resistor coupled to a second node within the filter for controlling a second parametric function of the filter, the second variable resistor including a second wiper

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arm, and wherein the first and second wiper arms of the first and second variable resistors are jointly controlled by a single mechanical input to the signal processing circuit, and the first parametric function is signal level and the second parametric function is bandwidth.

23. (Original) The signal processing circuit of claim 22, further including a potentiometer housing the first and second variable resistors on a common shaft.

## 24. (Cancelled)

25. (Currently amended) A method of controlling a parametric equalizer, comprising:

providing a mechanical input for generating an input value; providing a control interface coupled to the mechanical input and having first and second variable elements which are jointly controlled; and

controlling a first and second control parameters of the parametric equalizer with the first and second variable elements in accordance with the input value of the mechanical input by moving the mechanical input in a first direction to simultaneously increase the first and second control parameters of the parametric equalizer or moving the mechanical input in a second direction to simultaneously decrease the first and second control parameters.

26. (Original) The method of claim 25, wherein the first and second variable elements are first and second variable resistors.

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- 27. (Original) The method of claim 25, wherein the first and second resistors are housed with a potentiometer and controlled by a common shaft.
- 28. (Original) The method of claim 25, wherein the first control parameter is signal level of the parametric equalizer and the second control parameter is bandwidth of the parametric equalizer.
- 29. (Currently amended) An audio system, comprising: an input port for receiving an input consisting of a single audio signal;
- a bandwidth filter circuit coupled to the input port for receiving and filtering the audio signal, the bandwidth filter circuit being tunable in response to an input value;
- a signal level filter circuit coupled to the input port for receiving and filtering the audio signal, the signal level filter circuit being tunable in response to an input value; and
- a mechanical input a control interface for generating an input value and being configured to communicate the input value to the bandwidth filter circuit and the signal level filter circuit, the bandwidth filter circuit and the signal level filter circuit modifying a bandwidth and a signal level of the audio signal in accordance with the input value.
- 30. (Previously presented) The audio system of claim 29, including:
- a center frequency filter circuit coupled to the input port for receiving and filtering the audio signal, the center

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frequency filter circuit being tunable in response to a second input value; and

a second control interface for generating the second input value and being configured to communicate the second input value to the center frequency filter circuit, the center frequency filter circuit modifying a center frequency of the audio signal in accordance with the second input value.

- 31. (Previously presented) The audio system of claim 30, including a control panel for mounting the control interface and the second control interface.
- 32. (Previously presented) The audio system of claim 29, further including a guitar for generating an input audio signal which is communicated to the input port.
- 33. (Previously presented) The audio system of claim 32, further including a pre-amplifier coupled for receiving the input audio signal from the guitar.
- 34. (Previously presented) The audio system of claim 29, further including a speaker system having an input coupled to an output of the bandwidth filter circuit or the signal level filter circuit.